Chloroprene-PBPK-models

Himmelstein

Human lung microsomes – pooled from 5 donors

Human lung cytosol – 1 donor!

1-CEO hydrolysis: sample taken immediately after chemical is introduced to determine IC

1-CEO oxidation: doesn't say that initial condition was measured.

Ventilation/CO set to ½ standard for closed chamber, but standard for bioassay.

Generally, enzyme Km's should not vary between tissues, or genders, since the enzyme is the same. In the in vitro paper, Himmelstein reports Km in mouse liver and lung for CP oxidation as 1.03 and 1.5 uM, which are fairly close, suggesting that an adequate fit could be obtained using a common value for Km.

Yang

Assumes male = female microsome content

Compares current in vitro kinetic data, different lab, etc., for females to older data from Himmelstein for males.